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# FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:  
West Bolivar School District

Prepared By:  
Cheryl Arnold  
Ms. Forestry Commission

Time Period Covered by This Plan:  
2012 - 2021

Date Plan Prepared:  
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Plan Type:  
Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

**Property Name: S16-T24N-R7W**

MISSISSIPPI FOREST STEWARDSHIP PROGRAM

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**MISSISSIPPI FORESTRY COMMISSION  
FOREST STEWARDSHIP MANAGEMENT PLAN**

**LANDOWNER INFORMATION**

Name: West Bolivar School District  
Mailing Address: P.O. Box 189  
City, State, Zip: Rosedale, MS 38769  
Country: United States of America  
Contact Numbers: Home Number:  
Office Number: 662-759-3525  
Fax Number: 662-759-6795  
E-mail Address: hphillips@mde.k12.ms.us  
Social Security Number (optional):

**FORESTER INFORMATION**

Name: Cheryl Arnold , Service Forester  
Forester Number: 01662  
Organization: Ms. Forestry Commission  
Street Address: P.O. Box 1646  
148 N. Edison St.  
City, State, Zip: Greenville, MS 38702  
Contact Numbers: Office Number: 662-332-3358  
Fax Number:  
E-mail Address: carnold@mfc.state.ms.us

**PROPERTY LOCATION**

County: Bolivar    Total Acres: 650    Latitude: -90.93    Longitude: 33.93  
Section: 16    Township: 24N    Range: 7W

**DISCLAIMER**

This information was derived from a small sampling of the forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. These estimations are temporally static. Events and circumstances may occur within the survey area that will physically alter the forest resources and therefore will not be reflected in this plan.

**INTRODUCTION**

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

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## **OBJECTIVES**

### *Timber Production*

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

### *Wildlife Management - General*

The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone.

## **PROPERTY DESCRIPTION**

### *General Property Information*

This section is located in the Northwest part of Bolivar County. It is one mile east of Gunnison, MS. It is bordered on the North by Warfield Road and on the East by Mt. Zion Rd. It has a combination of agricultural land and scattered forests on the South and West sides. The forests on the section are located in the bottom Southwest Corner mostly making access by agricultural turn rows. The Bogue Phalia Bayou snakes through the forests on the section from West to East splitting it into two parts. The Northern portion contains 23.64 acres. The Southern portion contains another 125.43 acres. There is a small forest area in the Northwest corner that contains 18.67 acres. The bayou makes access to the southern part difficult because you have to cross the bayou to get access to it, and there are no permanent roads or bridges. The section contains an additional 482.70 acres of open agricultural land.

### *Water Resources*

Intermittent streams and drains identified will be managed in accordance with Mississippi's Best Management Practices. The Bogue Phalia Bayou snakes through the forested portion of the section from West to East. The bayou is considered a major drainage and does hold water most of the time. It will be protected on each side with a streamside management area.

### *Timber Production*

The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

### *Threatened and Endangered Species*

No threatened and endangered species were identified during the reconnaissance and evaluation of your property. However, if any threatened or endangered species is

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discovered in the future, special management strategies will be implemented to protect the species.

### *Interaction with Surrounding Property*

Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

### *Soils General*

Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other adverse effects on the soil. The following soils are identified for this property: Dowling Clay (Dc) and Sharkey Silty Clay (Se).

### *Archeological and Cultural Resources*

No archeological or cultural resources were found during a reconnaissance of the property. However, if any archeological or cultural resources are discovered at any time on the property, special management strategies will be implemented to protect and preserve the area. These areas can include churches, old cemeteries, old home sites, indian mounds, and other areas of historical importance.

## **GENERAL PROPERTY RECOMMENDATIONS**

### *Forest Protection*

A healthy and vigorously growing stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

#### **Insects and Diseases**

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- Heavy defoliation of hardwood leaves
- Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

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### Fire Protection

Your forest should be protected from wildfire at all times. The best way to protect your investment is by establishing and maintaining firebreaks around the property. Guidelines for establishment and maintenance of firebreaks may be found in Mississippi Forestry Commission publication #107, *Mississippi's Best Management Practices*.

### Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting area.

### Boundary Lines

It is the responsibility of the landowner to ensure that all property lines and boundaries designating areas to receive forestry work are clearly identified and visible to all contractors.

**Note:** Some forest practices may cause temporary adverse environmental or aesthetic impacts. These practices will only cause short-term adverse impacts where they are installed. Special efforts will be made to minimize adverse effects when carrying out any of the practices. Examples include: site preparation, planting, prescribed fires, firebreak installation and maintenance, road installation and maintenance, pesticide applications and timber harvesting.

### *Water Quality Protection*

The objective of the landowner is to protect, preserve and enhance all water sources on or transecting the property. This can best be achieved by implementation of Best Management Practices in all aspects of the management of the property.

### *Aesthetics*

The goal is to assure that the property is managed in such a way that is aesthetically pleasing to the landowner as well as the community. Activities could include, maintaining buffer strips along the road and adjacent to the home site, planting wildflowers along the road, and trees with attractive fall and spring color along the drive and near the home site.

### *Ecological Restoration*

Ecological restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. A reconnaissance of the property has been conducted and no ecological restoration activities are recommended at this time.

### *Wildlife Mgt. Target Species*

The objective of this practice is to provide habitat best suited for the featured or target species. Habitat management will focus on providing food, cover, water, and space to facilitate the target species.

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### *Environmental Education*

Environmental educational goals are to provide educational opportunities for children and adults through the development of items such as nature trails with tree identification markers, wildlife viewing areas, picnic areas, parking, public restroom facilities.

### *Wildlife Management General*

The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining access roads and firelanes, providing openings within the forest, and leaving mast producing and den trees.

### *Timber Management*

Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production throughout the life of the stand.

### *Recreation*

According to landowner objectives the recreational use of the property could prove to be an avenue for personal enjoyment or for generating income. An evaluation of your property should be conducted and a plan developed to accomplish your specific goals for recreational activities on your property.

## SOIL TYPES

### *Soil Description*

The two main soils found on the property is a Dowling Clay and a Sharkey Silty Clay.

The Dowling Clay (Dc) is a dark colored, poorly drained soil consisting of firm clay throughout and is faintly mottled at depths below about 4 inches. It occupies depressions or abandoned stream channels, and is generally found in association with Sharkey, Alligator, and Forestdale soils. It tends to remain wet longer than the surrounding soil because the water from the slopes surrounding it will drain into it.

The Sharkey Silty Clay (Se) is formed from fine-textured Mississippi River Alluvium. The individual areas of this soil are quite large. It is poorly drained and has a clay subsurface layer. It differs from other sharkey clay soils in that it has a silty clay surface soil. The surface color is very dark grayish-brown and is about 6 inches thick. The subsurface soil is about 48 inches thick.

## STRATA

### *Strata 1*

#### Strata Description

Strata #1 contains all the sawtimber on the section and includes the following stands.  
Stand #2 is in the Northwest corner and contains 18.67 acres. Stand #6 runs along the

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southern border and contains 69.27 acres. Stand #7 is located just above the Bogue Phalia Bayou and contains 23.64 acres. Stand #12 is located just below the same bayou and contains 56.16 acres. The bayou runs from west to east snaking through the forested portion of the section, and contains water just about year round. The stands are all about 61 years old and have about 140 square feet of basal area per acre. The stands contain an average of 186 trees per acre. The pulpwood volume averages about 55 tons per acre and the sawtimber volume is about 41 tons per acre. Species include Green Ash, Sugarberry, Elm, Pecan, and some Oaks.

**Strata Recommendations**

Stands #2 and #6 will continue to grow during the life of this plan. They will be monitored by the Mississippi Forestry Commission for insects, diseases, general health, and fire.

Stands #7 and #12 will undergo a final harvest in the year 2012. A total of 79.8 acres will be harvested and artificial regeneration will occur in the planting year following harvest. The Bayou may pose some harvesting challenges regarding access, but a streamside management area is marked on both sides of the bayou to ensure the protection of it.

**Activity Recommendations**

Stand #7 will be harvested in the year 2012 and contains 23.64 acres. It is located just north of the Bogue phalia Bayou. Stand #12 will be harvested in the year 2012 and contains 56.16 acres. It is located just south of the Bogue Phalia Bayou. Both stands will be artificially regenerated in 2013 with Oak seedlings, if harvesting is complete.

**Harvest**

Stand #7 and stand #12 containing a combined acreage of 79.8 will be harvested in the year 2012. The bayou is protected by a streamside management zone clearly marked on both sides of it. This will be a final harvest.

**Regeneration**

79.8 acres from stands 7 and 12 will be artificially regenerated in the year 2013. It will be replanted with Oak seedlings at a rate of at least 302 trees per acre. Any necessary site prep will be done following harvest to prepare the site for planting.



16-24-7




**16-24-7**  
West Bolivar School District  
2012 to 2021  
650.44 Acres






## 16-24-7 West Bolivar School District


### Property

 Property (1)

### Category 1: Stands


 Sawtimber (4)

### Category 3: Non-Forest Stands


 Non-Forest (8)

## MFC Basemap


### County Boundary

 County Boundary (1)


### Quadrangle Grid

 USGS Quad (1)


### PLS Townships

 PLS Townships (1)


### Survey Districts

 District 2 (1)


### Blockgroup (Census 2000)

 Blockgroup (Census 2000) (2)


### Block (Census 2000)

 Block (Census 2000) (5)


### Tract/BNA (Census 2000)

 Tract/BNA (Census 2000) (2)


### County Roads

 County Roads (3)


### Runways

 Runways (1)

### School Sections

 School Sections (1)

### Public School Districts

 WEST BOLIVAR SCHOOL DISTRICT (1)

### US Congressional District

 US Cong Dist #2 (1)


### MS Senate

 12 (1)


### MS House

 29 (1)


### Intermittent Streams

 Intermittent Streams (2)


### Hydrologic Units (Basins)

 BOGUE PHALIA RIVER (1)


### Historic Forest Boundary

 Bottomland Hardwood (Oak-Gum-Cottonwood-Cypress) (1)


### MS Forest Habitat


 YAZOO BASIN WETLANDS (1)

### Physiographic Region


 Delta (1)

### Soil Associations


 forestdale-dundee-sharkey (1)

 commerce-robinsonville-crevasse (1)


### Surface Geology

 ALLUVIUM (1)


### MFC Districts

 MFC Districts (1)

### MFC Dispatch Units

 MFC Dispatch Units (1)

### MS Outline

 MS Outline (1)

Stand Activity Schedule for  
West Bolivar School District  
16 24N 7W

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
2012						
1	7	Harvest, Mechanical, Final, Machine, Misc Hardwood	24	\$960.00	\$19,200.00	
1	12	Harvest, Mechanical, Final, Machine, Misc Hardwood	56	\$2,240.00	\$44,800.00	
			Yearlv Totals	80	\$3,200.00	\$64,000.00
2013						
1	7	Regeneration, Artificial, Plant, Hand, Loblolly	24	\$3,000.00	\$0.00	
1	12	Regeneration, Artificial, Plant, Hand, Misc Hardwood	56	\$7,000.00	\$0.00	
			Yearlv Totals	80	\$10,000.00	\$0.00
			Grand Totals	160	\$13,200.00	\$64,000.00